THE CHALLENGE: Aging Offshore production equipment needed recoating to safeguard its condition and to prolong its life.

The equipment was located well offshore with limited support infrastructure. A coating system was required which would apply and perform well under the typically adverse offshore conditions.

THE SOLUTION: TFT Kevlar® reinforced BIO-DUR 561SW epoxy coating was chosen for this project. This product is specifically designed for wet surface and underwater application to steel in either salt or fresh water.

BIO-DUR 561SW is a 1/1 volume mix product, this is the ideal mix ratio from a practical point of view since minor mixing errors in mixing have the minimum effect on performance. The components were supplied in contrasting colors of White epoxy base and Black curing agent to yield a uniform gray mixture.

The majority of applications were made with a heated, 1/1 ratio plural component applicator. This equipment preheated the individual components then proportioned and pumped them through separate hoses to a static mixer about 50’ distant from the mixing equipment. Once mixed the product was pumped to a pressure pad applicator used by a diver to spread the product on prepared steel.

The steel surfaces were prepared for coating by high pressure water blasting, intact existing coating adjacent to damaged or corroding areas were simply high pressure water blasted prior to application of the BIO-DUR 561SW.

Work started during the end of the hot summer season and continued into the much colder winter. As water temperatures plunged the BIO-DUR 561SW began to increase in viscosity. Thin Film Technology laboratories responded by formulating a lower viscosity “Winter” quality to allow applications well into the cold weather conditions.

RESULT: Application by pressure pad was effective and yielded an excellent, tightly adherent film. The BIO-DUR 561SW products cured well overnight and have formed a tough, tightly adherent protective coating over the structure. The freshly applied coating was resistant to removal by wave action from the moment of application and suffered no damage before curing hard.

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BIO-DUR 561SW USED TO RECOAT
OFFSHORE PRODUCTION FACILITY